## "The Heartbeat of Indiana"

Volume 1: Issue 2

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# TRAUMA TIMES



## TRAUMA REGISTRY UPDATE

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Wishard and Riley Hospitals have successfully exported trauma data from their trauma registries into the state registry. They are currently comparing selected records from the state registry to the data in their hospital registries to verify that data transferred without errors. Deaconess and Memorial South Bend have also just imported their first data and are awaiting data validation. CDM, the vendor for the St. Mary's and Parkview trauma registries is expected to have their export ready later this month. Clarian Methodist has experienced a data corruption issue and is working with their vendor to resolve this before attempting a state import.

State server issues have been resolved, and the state is now proceeding with the Critical Access Hospital pilot project. A letter was sent out to all Critical Access Hospitals to explain the project in detail, and 15 hospitals chose to participate. The project is running from June 1, 2008 through July 31, 2008. The participating hospitals are reporting on the critically injured patients that require transfer to a higher level of care. Data gathered during this project will assist with trauma system planning efforts.

## INTERESTING INDIANA TRAUMA SYSTEM FACTS:

- Injury is the leading cause of death from 1 year to 34 years of age.
- More than 95,000 Hoosiers are hospitalized and over 5,000 die from injuries each year.
- Indiana is 1 of only 2 states with no laws or regulations providing legal authority for state oversight of trauma care.

Laura Gano, an MPH student at IU, will be starting an internship with the trauma registry on August 5th. She will analyze data from the CAH project and assist with other registry projects.

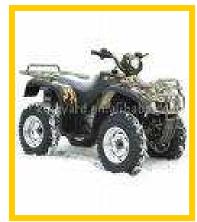
The trauma registry is available to all hospitals in the state. If your hospital is interested in more information about the trauma registry, contact the state trauma system manager, Susan Perkins, at <a href="mailto:sperkins@isdh.in.gov">sperkins@isdh.in.gov</a>.

## **EMS LEGISLATIVE UPDATE**

Second Regular Session 115th General Assembly (2008)

SENATE ENROLLED ACT No. 249: This bill requires the Emergency Medical Services Commission to adopt rules concerning triage and transportation protocols for the transportation of trauma patients consistent with the field triage decision scheme of the American College of Surgeons Committee on Trauma. The EMS division of the Department of Homeland Security has implemented a workgroup to work on these protocols. For more information on the workgroup's activities contact Jason Smith at <a href="mailto:jsmith@idhs.in.gov">jsmith@idhs.in.gov</a>.

## NJURY PREVENTION



ATVs are a popular but dangerous form of entertainment, with 7 million currently in use in the United States. Currently marketed as 4-wheelers, the original 3-wheeled ones that came out as alternatives to off-road motorcycles caused so many injuries that the manufacturers were required to take them off the market.

The U.S. Consumer Product Safety Commission reported 916 ATV-related fatalities nationwide from 2002 to 2006. Indiana Emergency Medical Services reported 311 ambulance runs due to ATV injuries during 2007. Researchers from Oklahoma reported on 193 patients they treated over a 2-year period. While only 3 were fatalities, 50% of patients suffered head injuries, and while children represent only 14% of all ATV users, they accounted for 47% of inju-

Donald Reed, MD Trauma Medical Director Lutheran Hospital



## INDIANA TRAUMA SYSTEM CONSULTATION VISIT

ries (of those, 30% involved brain or spinal cord injuries).

Indiana is actively in the process of developing a trauma system. In 2006, the Indiana General Assembly passed and the governor signed legislation empowering the Indiana State Department of Health (ISDH) to develop a trauma system in the state (P.L. 155-2006). The ISDH created a Trauma Systems Advisory Task Force to help in the development of this system.

After 2 years of study, the task force recommends pursuing a consultation agreement with the Committee on Trauma of the American College of Surgeons, a non-biased, nationally-recognized organization. They would be charged to evaluate the resources, legislation, trauma care delivery, trauma registries/data analysis, performance improvement, interagency cooperation/communication, professional/community education, and injury prevention and control currently in Indiana. They would make available their knowledge and experience of other states to develop the trauma system in Indiana that works for everyone. This consultation requires intensive advance preparation, a 3-day visit from the College and includes professionals from surgery, emergency medicine, trauma nursing and emergency medical services.

The 7 trauma hospitals in Indiana verified by the American College of Surgeons Committee on Trauma have contributed \$10,000 each to fund this consultation, which is expected to cost \$60-70,000. If funds received exceed the total amount needed for the consultation, the remaining funds will be added to funds being requested from the ISDH Office of Rural Health and commercial health insurers in Indiana to begin implementation of the ACS recommendations and to support educational needs for all trauma system components.

The Indiana Hospital Association has agreed to collect and distribute the financial support.

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## **DEFINITIVE CARE FACILITIES "What sets them apart?"**

The **Level I** facility is a regional resource trauma center that is a tertiary care facility central to the trauma care system. Ultimately, all patients who require the resources of the Level I center should have access to it. This facility must have the capability of providing leadership and total care for every aspect of injury, from prevention through rehabilitation. In its central role, the Level I center must have adequate depth of resources and personnel. Because of the large personnel and facility resources required for patient care, education, and research, most Level I trauma centers are university-based teaching hospitals. Other hospitals willing to commit these resources, however, may meet the criteria for Level I recognition. In addition to acute care responsibilities, Level I trauma centers have the major responsibility of providing leadership in education, research, and system planning. This responsibility extends to all hospitals caring for injured patients in their regions. Medical education programs include residency program support and postgraduate training in trauma for physicians, nurses, and prehospital providers. Education can be accomplished through a variety of mechanisms, including classic continuing medical education (CME), trauma and critical care fellowships, preceptorships, personnel exchanges, and other approaches appropriate to the local situation. Research and prevention programs, as defined in this document, are essential for a Level I trauma center.

The Level II trauma center is a hospital that also is expected to provide initial definitive trauma care, regardless of the severity of injury. Depending on geographic location, patient volume, personnel, and resources, however, the Level II trauma center may not be able to provide the same comprehensive care as a Level I trauma center. Therefore, patients with more complex injuries may have to be transferred to a Level I center (for example, patients requiring advanced and extended surgical critical care). Level II trauma centers may be the most prevalent facility in a community, managing the majority of trauma patients. The Level II trauma center can be an academic institution or a public or private community facility located in an urban, suburban, or rural area. In some areas where a Level I center does not exist, the Level II center should take on the responsibility for education and system leadership.

The **Level III** trauma center serves communities that do not have immediate access to a Level I or II institution. Level III trauma centers can provide prompt assessment, resuscitation, emergency operations, and stabilization and also arrange for possible transfer to a facility that can provide definitive trauma care. General surgeons are required in a Level III facility. Planning for care of injured patients in these hospitals requires transfer agreements and standardized treatment protocols. Level III trauma centers are generally not appropriate in an urban or suburban area with adequate Level I and/or Level II resources.

The Level IV trauma facilities provide advanced trauma life support before patient transfer in remote areas where no higher level of care is available. Such a facility may be a clinic rather than a hospital and may or may not have a physician available. Because of geographic isolation, the Level IV trauma facility is the de facto primary care provider. If willing to make the commitment to provide optimal care, given its resources, the Level IV trauma facility should be an integral part of the inclusive trauma care system. As at Level III trauma centers, treatment protocols for resuscitation and transfer, data reporting, and participation in system performance improvement are essential. A Level IV trauma facility must have a good working relationship with the nearest Level I, II, or III trauma center. This relationship is vital to the development of a rural trauma system in which realistic standards must be based on available resources. Optimal care in rural areas can be provided by use of existing professional and institutional resources supplemented by guidelines that result in enhanced education, resource allocation, and appropriate designation for all levels of providers. Also, it is essential for the Level IV facility to have the involvement of a committed health care provider who can provide leadership and sustain the affiliation with other centers. An inclusive system should leave no facility without direct linkage to a Level I or Level II trauma center. This association should facilitate transfer of seriously injured patients who require a higher level of care. Exchange of medical personnel between Level I/II and Level III/ IV facilities may be an excellent way to develop this relationship. The Level I and II trauma centers have an obligation to extend their education to rural areas in the form of Introduction professional education, consultation or community outreach. A mechanism should provide feedback about individual patient care and outcome analysis to the referring hospital.

Committee on Trauma American College of Surgeons, Resources For Optimal Care of the injured Patient 2006, p. 18, 19,20, 2006.

American College of Surgeons



## INDIANA ENA OUTREACH GRANT

On June 24, 2008, the Christopher Reeve Paralysis Foundation granted the Indiana State Council of the Emergency Nurses Association \$15,000 to do additional outreach and teaching of the Emergency Nurses Pediatric Course (ENPC) and the Trauma Nursing Core Course (TNCC). This grant especially entices and encourages rural Indiana nurses to gain verification of these basic core trauma skills. These grant funds are not restricted to only critical access facilities, but are for any rural facility. In particular, these funds are to be targeted to facilities which receive trauma patients and frequently have to stabilize, package, and transfer to a higher level of care. It is encouraged that all who teach any TNCC or ENPC course actively reach out to any and all nurses who face trauma patients in rural or outlying facilities. These facilities potentially qualify to have each of their attendees receive \$100 off of the course fee with no limitation to the total number of attendees qualified to receive the decreased rate.

The funds are available through the Indiana State Council of the Emergency Nurses Association. Contact person is Merry Addison, RN, MSN, CEN-grant writer, at larrymerry@mail.ccsdana.net or 765-665-3667.

### RESEARCH SYMPOSIUM

On April 17, 2008 the Indiana Spinal Cord and Brain Injury Research Board held its first research symposium at the Indiana History Center in downtown Indianapolis. The program was well-received by the approximately 90 people who attended.

Attendees were representative of several areas with an interest in spinal cord and brain injury, including neurosurgery, neuropsychology, vocational rehabilitation, trauma, injury prevention, traumatic brain injury survivors, universities and public health.

Gerry Oxford, PhD, of the Stark Neurosciences Research Institute at the IU School of Medicine welcomed everyone and was followed by Annette Seabrook, PT, of the Rehabilitation Hospital of Indiana and Chairperson of the Research Board, who spoke on the history of the Indiana Spinal Cord and Brain Injury Research Fund. Chuck Dietzen, MD, of Crossroads Rehabilitation Center, the Timmy Foundation, and the Research Board, discussed the epidemiology and health care costs for SCI and TBI. Research projects were presented in both the morning and afternoon sessions, and attendees were introduced to the Indiana TBI grant and related programs. A panel discussion wrapped up the days events. The Board used information from presenters and attendees to guide its first research grant application process, which is currently underway. The first grant awards will be distributed by the end of 2008.

## 2008 Trauma Task Force Meetings:

ISDH Trauma System Advisory Task Force Meeting:

• November 21st, 2008

## In-State Trauma Conferences:

- Wishard Hospital, Indianapolis:
   November 7th & 8th, 2008
- Deaconess Hospital, Evansville:
   November 14th & 15th, 2008

If you have any suggestions, comments, ideas, etc., please contact the publisher of this newsletter:
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